

CLAIMS:

1. A rotatable platen assembly, comprising a patterned surface for securing a pad thereto, the patterned surface comprising:
 - (a) one or more raised portions disposed on the patterned surface defining a mounting surface; and
 - (b) a recessed area defined by the one or more raised portions.
2. The rotatable platen assembly of claim 1, wherein the recessed area comprises a plurality of grooves.
3. The rotatable platen assembly of claim 1, wherein at least a portion of the recessed area extends to a perimeter of the rotatable platen.
4. The rotatable platen assembly of claim 1, wherein the rotatable platen is part of a chemical mechanical polishing system.
5. The rotatable platen assembly of claim 1, wherein the platen comprises aluminum.
6. The rotatable platen assembly of claim 1, wherein the pad comprises polyurethane.
7. The rotatable platen assembly of claim 1, wherein the pad comprises a plastic foam.
8. An apparatus for polishing a substrate, comprising:
 - (a) a rotatable platen, comprising a patterned surface for securing a pad thereto, the patterned surface comprising:
 - (i) one or more raised portions defining a mounting surface;and

(ii) a recessed area defined by the one or more raised portions; and

(b) a pad disposed on the mounting surface.

9. The apparatus of claim 8, further comprising a coating disposed on the patterned surface.

10. The apparatus of claim 8, wherein the pad comprises polyurethane.

11. The apparatus of claim 8, wherein the pad comprises a plastic foam.

12. The apparatus of claim 8, wherein the recessed area comprises a plurality of grooves.

13. The apparatus of claim 8, wherein at least a portion of the recessed area extends to a perimeter of the rotatable platen.

14. The apparatus of claim 8, wherein the recessed area and the pad define a plurality of pathways.

15. The apparatus of claim 14, wherein at least a portion of the plurality of pathways extend to a perimeter of the rotatable platen to allow fluid communication between a backside of the pad and an environment of the rotatable platen.

16. A substrate polishing apparatus, comprising:

(a) one or more polishing stations each including a rotatable platen wherein at least one of the rotatable platen comprises a patterned surface for securing a pad thereto, the patterned surface comprising:

(i) one or more raised portions defining a mounting surface;

and

(ii) a recessed area defined by the one or more raised portions; and

(b) one or more polishing heads rotatably mounted above the rotatable platens.

17. The apparatus of claim 16, further comprising a pad disposed on the mounting surface.

18. The apparatus of claim 16, further comprising a coating disposed on the patterned surface.

19. The apparatus of claim 16, further comprising a motor coupled to the rotatable platen to selectively impart rotation.

20. The apparatus of claim 16, wherein the recessed area comprises a plurality of grooves.